

WPX Energy Rocky Mountain LLC - EBUS

GM 432-28

**H&P 318**

## **Post Job Summary**

# **Cement Surface Casing**

Date Prepared: 1/18/2015

Job Date: 1/11/2015

Submitted by: Patrick Ealey – Grand Junction Cement Engineer

*The Road to Excellence Starts with Safety*

Sold To #: 300721	Ship To #: 3565525	Quote #:	Sales Order #: 0902014355
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS	Customer Rep: Harry Samson		
Well Name: WPX GM	Well #: 432-28	API/UWI #: 05-045-22505-00	
Field: GRAND VALLEY	City (SAP): PARACHUTE	County/Parish: GARFIELD	State: COLORADO
Legal Description: NE SW-28-6S-96W-1530FSL-2329FWL			
Contractor: H & P DRLG	Rig/Platform Name/Num: H & P 318		
Job BOM: 7521			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HB50180	Srv Supervisor: Carlton Kukus		
Job			

Formation Name	
Formation Depth (MD)	Top
Form Type	BHST
Job depth MD	1754ft
Water Depth	
Perforation Depth (MD)	From

Well Data										
Description	New / Used	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Open Hole Section			13.5				0	1754	0	1754
Casing	3	9.625	8.921	32.3	8 RD	H-40	0	1754	0	1754

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make
Guide Shoe	9.625	1		1754		Top Plug	9.625	1	HES
Float Shoe	9.625	1				Bottom Plug	9.625		HES
Float Collar	9.625	1		1709		SSR plug set	9.625		HES
Insert Float	9.625					Plug Container	9.625	1	HES
Stage Tool	9.625					Centralizers	9.625		HES

Miscellaneous Materials											
Gelling Agt		Conc		Surfactant		Conc		Acid Type		Qty	Conc
Treatment Fld		Conc		Inhibitor		Conc		Sand Type		Size	Qty

Fluid Data

Stage/Plug #: 1

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
1	Fresh Water	Fresh Water	20	bbl	8.34			4	

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
2	VariCem GJ5	VARICEM (TM) CEMENT	250	sack	12.3	2.45		8	14.17

14.10 Gal		FRESH WATER							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	VariCem GJ5	VARICEM (TM) CEMENT	170	sack	12.8	2.18		8	12.11
12.05 Gal		FRESH WATER							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
4	Fresh Water Displacement	Fresh Water Displacement	134.5	bbl	8.34			10	
Cement Left In Pipe		Amount	45 ft		Reason		Shoe Joint		
Comment 5 BBLS OF CEMENT TO SURFACE, GOOD RETURNS THROUGHOUT CEMENT JOB									

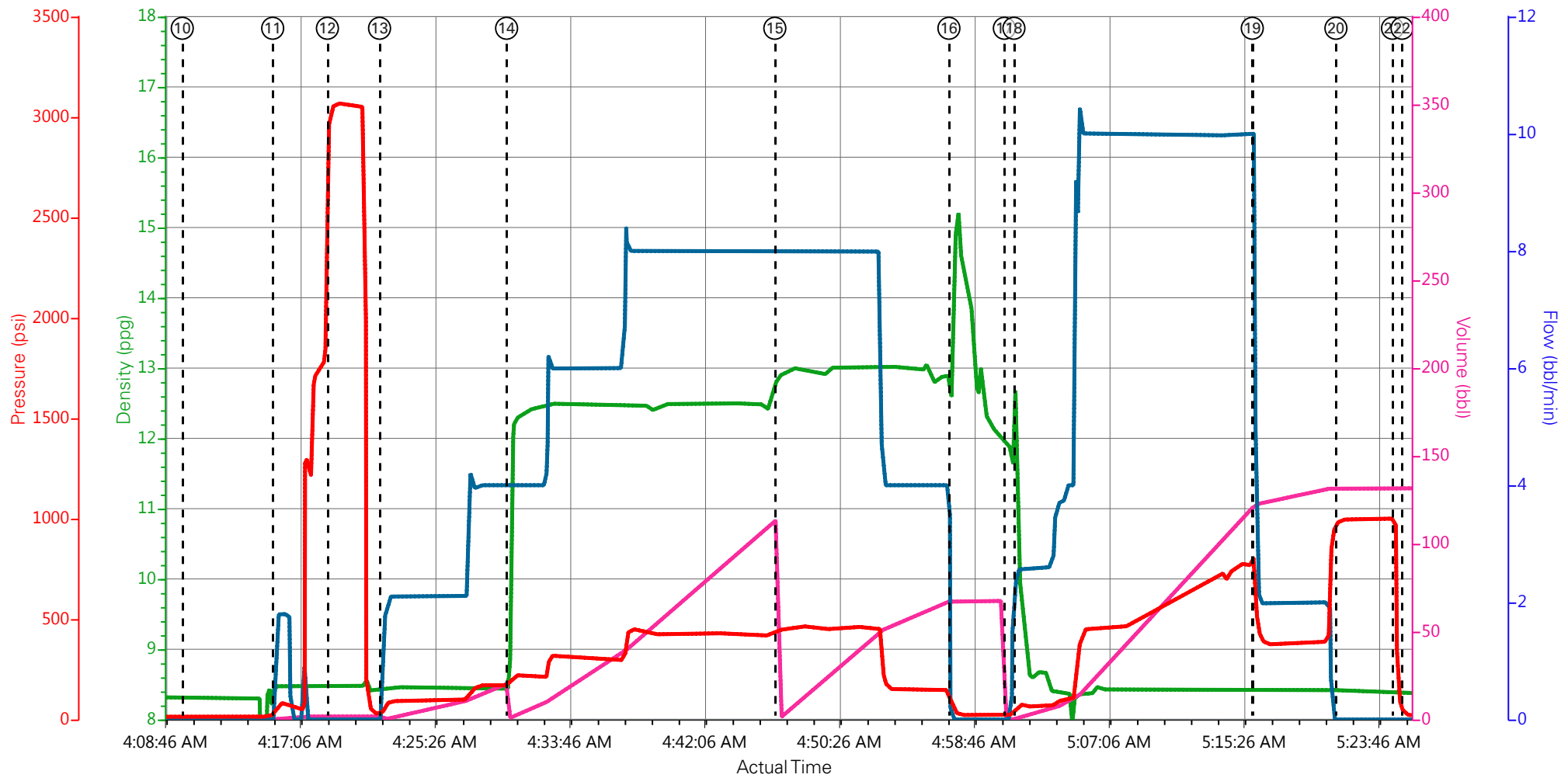
## 1.1 Job Event Log

Type	Seq. No.	Activity	Date	Time	Source	DH Density (ppg)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comb Pump Rate (bbl/min)	Comments
Event	1	Call Out	1/10/2015	13:00:00	USER					HES CREW CALLED
Event	2	Pre-Convoy Safety Meeting	1/10/2015	14:30:00	USER					ALL HES
Event	3	Crew Leave Yard	1/10/2015	14:45:00	USER					1-F-550 PICKUP, 1-ELITE PUMP TRUCK, 2-660 BULK TRUCKS
Event	4	Arrive At Loc	1/10/2015	16:00:00	USER					HES ARRIVED 2 HOURS EARLY
Event	5	Assessment Of Location Safety Meeting	1/10/2015	16:20:00	USER					RIG WAS RUNNING CASING HES WAITED TO SPOT EQUIPMENT DUE TO THE SIZE OF LOCATION
Event	6	Pre-Rig Up Safety Meeting	1/10/2015	20:00:00	USER					ALL HES
Event	7	Rig-Up Equipment	1/10/2015	20:15:00	USER					RIG UP IRON TO THE STAND PIPE, WATER HOSE TO THE UPRIGHT AND BULK HOSES TO PUMP TRUCK
Event	8	Rig-Up Completed	1/11/2015	03:00:00	USER					COMPLETED
Event	9	Pre-Job Safety Meeting	1/11/2015	03:30:00	USER					ALL HES AND RIG CREW
Event	10	Start Job	1/11/2015	04:10:00	COM5					TD: 1753.94FT TP: 1753.94FT SJ: 45.10FT OH: 13.5 CSG: 9.625 32.3#

										MUD WT: 9.9 VISC: 80
Event	11	Prime Pumps	1/11/2015	04:15:35	USER	8.47	83	2	2	FILL LINES TO PRESSURE TEST
Event	12	Test Lines	1/11/2015	04:18:58	COM5	8.50	3082	2		PRESSURE TEST LINES TO 3000 PSI, PRESSURE TEST OK
Event	13	Pump Spacer 1	1/11/2015	04:22:11	COM5	8.42	176	20	4	20 BBL FRESH WATER SPACER
Event	14	Pump Lead Cement	1/11/2015	04:30:02	COM5	12.3	440	109.1	8	250 SKS OF VARICEM CEMENT 12.3PPG 2.45YIELD 14.17GAL/SK WEIGHT OF CEMENT VERIFIED VIA MUD SCALES THROUGHOUT LEAD CEMENT
Event	15	Pump Tail Cement	1/11/2015	04:46:37	COM5	12.8	460	66	8	170 SKS OF VARICEM CEMENT 12.8PPG 2.18YIELD 12.11GAL/SK WEIGHT OF CEMENT VERIFIED VIA MUD SCALES THROUGHOUT TAIL CEMENT
Event	16	Shutdown	1/11/2015	04:57:23	USER	12.8		66		SHUTDOWN END OF CEMENT, HES WASHED UP ON TOP OF PLUG
Event	17	Drop Top Plug	1/11/2015	05:00:49	USER					PLUG AWAY NO PROBLEMS
Event	18	Pump Displacement	1/11/2015	05:01:24	COM5	8.34	778	120	10	FRESH WATER DISPLACEMENT
Event	19	Slow Rate	1/11/2015	05:16:08	USER	8.41	400	14.5	2	SLOW RATE TO BUMP PLUG
Event	20	Bump Plug	1/11/2015	05:21:18	COM5	8.41	390	134.5		BUMPED PLUG AT 390 PSI TOOK TO 980 PSI
Event	21	Check Floats	1/11/2015	05:24:48	USER	8.41	990	134.5		FLOATS HELD .5 BBLs BACK TO TANKS

Event	22	End Job	1/11/2015	05:25:24	USER	5 BBL OF GOOD CEMENT BACK TO SURFACE
Event	23	Pre-Rig Down Safety Meeting	1/11/2015	05:30:00	USER	ALL HES
Event	24	Rig-Down Equipment	1/11/2015	05:45:00	USER	RIG DOWN ALL LINES AND EQUIPMENT
Event	25	Rig-Down Completed	1/11/2015	06:30:00	USER	COMPLETED
Event	26	Pre-Convoy Safety Meeting	1/11/2015	07:15:00	USER	ALL HES
Event	27	Crew Leave Location	1/11/2015	07:30:00	USER	1- F-550 1- ELITE PUMP TRUCK 2- 600 BULK TRUCKS
Event	28	Other	1/11/2015	07:31:00	USER	THANK YOU FOR CHOOSING HALLIBURTON CEMENT. CARL KUKUS AND CREW

# WPX\WPX GM 432-28/SURFACE



DH Density (ppg) Pump Stg Tot (bbl) PS Pump Press (psi) Comb Pump Rate (bbl/min)

Meeting n/a;n/a;n/a;n/a	11 Fill Lines 8.47;0.1;50;1.8	16 Shutdown 13.12;67.5;61;0	21 Check Floats 8.41;131.6;533;0	26 Pre-Convoy Safety Meeting n/a;n/a;n/a;n/a
ent n/a;n/a;n/a;n/a	12 Test Lines 8.5;1.7;3033;0	17 Drop Top Plug 11.91;0;21;0	22 End Job 8.38;131.6;27;0	27 Crew Leave Location n/a;n/a;n/a;n/a
ed 0;0.1;15;0	13 Pump Spacer 1 8.42;0;39;0.9	18 Pump Displacement 11.31;0.8;73;2.5	23 Pre-Rig Down Safety Meeting 8.36;131.6;16;0	28 Other n/a;n/a;n/a;n/a
Meeting 0;0.1;15;0	14 Pump Lead Cement 9.1;1;173;4	19 Slow Rate 8.41;122.4;572;4.1	24 Rig-Down Equipment n/a;n/a;n/a;n/a	
14;0	15 Pump Tail Cement 12.87;114.6;440;8	20 Bump Plug 8.41;131.6;990.48;0	25 Rig-Down Completed n/a;n/a;n/a;n/a	

HALLIBURTON | iCem® Service

Created: 2015-01-10 18:37:11, Version: 4.1.85

Edit

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 1/10/2015 10:15:06 PM

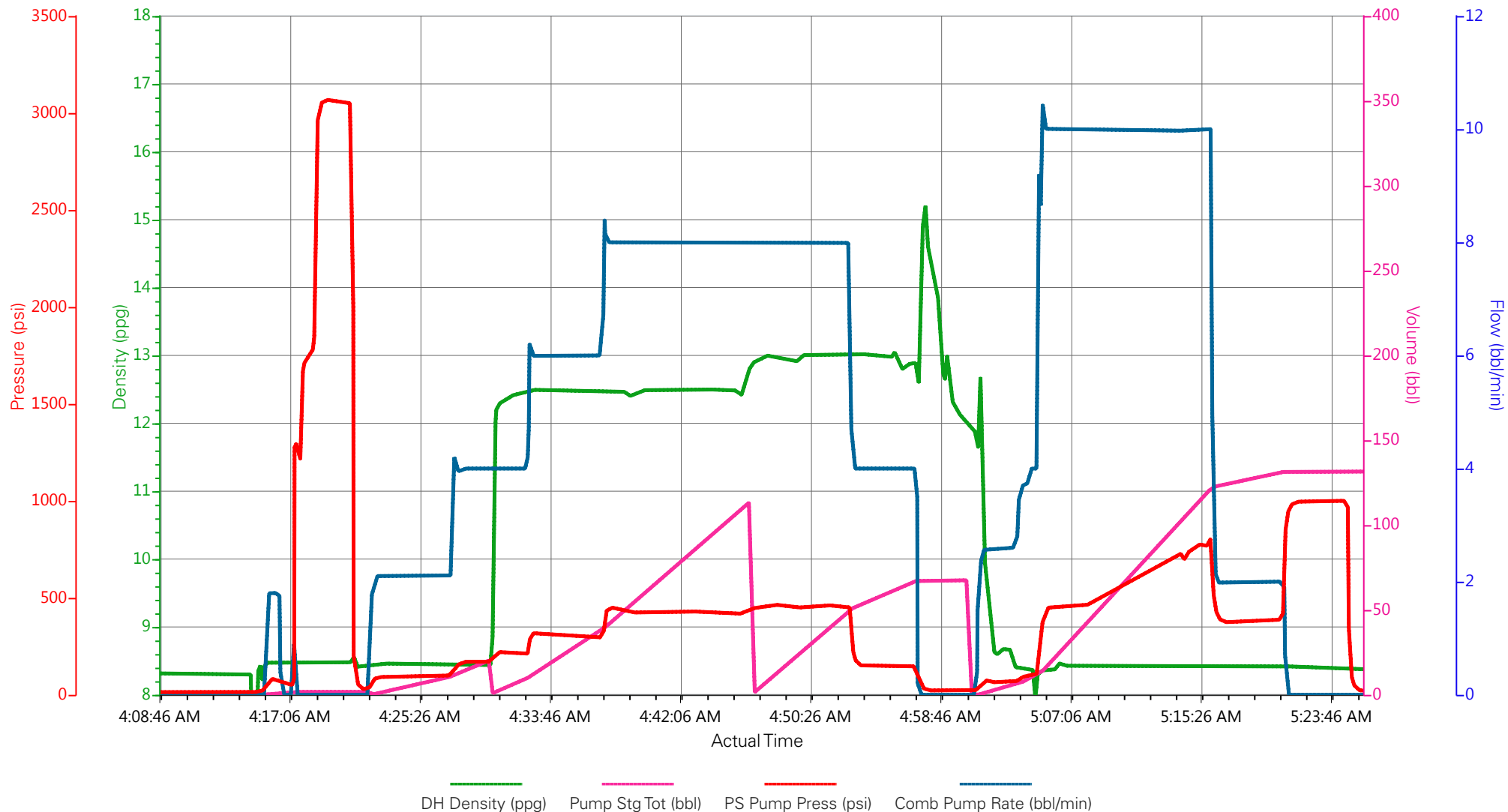
Well: WPX GM 432-28

Representative: Harry Samson

Sales Order #: 902014355

Supervisor/Operator: Carlton Kukus/Taylor Moreland E-4

# WPX/WPX GM 432-28/SURFACE





# HALLIBURTON

## Water Analysis Report

Company: WPX  
Submitted by: Carl Kukus  
Attention: J.Trout  
Lease: WPX GM  
Well #: 432-28

Date: 1/11/2015  
Date Rec.: 1/11/2015  
S.O.#: 902014355  
Job Type: Surface

Specific Gravity	<i>MAX</i>	<b>1</b>
pH	<i>8</i>	<b>7</b>
Potassium (K)	<i>5000</i>	<b>200</b> Mg / L
Calcium (Ca)	<i>500</i>	<b>120</b> Mg / L
Iron (FE2)	<i>300</i>	<b>3</b> Mg / L
Chlorides (Cl)	<i>3000</i>	<b>0</b> Mg / L
Sulfates (SO <sub>4</sub> )	<i>1500</i>	<b>200</b> Mg / L
Chlorine (Cl <sub>2</sub> )		<b>0</b> Mg / L
Temp	<i>40-80</i>	<b>50</b> Deg
Total Dissolved Solids		<b>250</b> Mg / L

Respectfully: Carl Kukus

Title: CEMENTING SUPERVISOR

Location: Grand Junction, CO

NOTICE:

This report is limited to the described sample tested. Any person using or relying on this report agrees that Halliburton shall not be liable for any loss or damage whether due to act or omission resulting from such report or if

<b>Sales Order #:</b> 0902014355	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 1/11/2015
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> HARRY SAMSON		<b>API / UWI: (leave blank if unknown)</b> 05-045-22505-00
<b>Well Name:</b> WPX GM		<b>Well Number:</b> 0080644734
<b>Well Type:</b> DIRECTIONAL GAS	<b>Well Country:</b> USA	
<b>H2S Present:</b> No	<b>Well State:</b> COLORADO	<b>Well County:</b> GARFIELD

Dear Customer,

We hope that you were satisfied with the service quality of this job performed by Halliburton. It is the aim of our management and service personnel to deliver equipment and service of a standard unmatched in the service sector of the energy industry.

Please take the time to let us know if our performance met with your satisfaction. Please be as critical as possible to ensure we constantly improve our service. Your comments are of great value to us and are intended for the exclusive use of Halliburton.

### CUSTOMER SATISFACTION SURVEY

CATEGORY	CUSTOMER SATISFACTION RESPONSE	
Survey Conducted Date	The date the survey was conducted	1/11/2015
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HB44726
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	HARRY SAMSON
HSE	Was our HSE performance satisfactory? Circle Y or N	Yes
Equipment	Were you satisfied with our Equipment? Circle Y or N	Yes
Personnel	Were you satisfied with our people? Circle Y or N	Yes
Customer Comment	Customer's Comment	CREW DID AN OUTSTANDING JOB

<b>CUSTOMER SIGNATURE</b>
---------------------------

<b>Sales Order #:</b> 0902014355	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 1/11/2015
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> HARRY SAMSON		<b>API / UWI: (leave blank if unknown)</b> 05-045-22505-00
<b>Well Name:</b> WPX GM		<b>Well Number:</b> 0080644734
<b>Well Type:</b> DIRECTIONAL GAS	<b>Well Country:</b> USA	
<b>H2S Present:</b> No	<b>Well State:</b> COLORADO	<b>Well County:</b> GARFIELD

### KEY PERFORMANCE INDICATORS

General	
<b>Survey Conducted Date</b> The date the survey was conducted	1/11/2015

Cementing KPI Survey	
<b>Type of Job</b> Select the type of job. (Cementing or Non-Cementing)	0
<b>Select the Maximum Deviation range for this Job</b> What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	Vertical
<b>Total Operating Time (hours)</b> Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	3
<b>HSE Incident, Accident, Injury</b> HSE Incident, Accident, Injury. This should be recordable incidents only.	No
<b>Was the job purpose achieved?</b> Was the job delivered correctly as per customer agreed design?	Yes
<b>Pumping Hours</b> Total number of hours pumping fluid on this job. Enter in decimal format.	1.5
<b>Type of Rig Classification Job Was Performed</b> Type Of Rig (classification) Job Was Performed On	Drilling Rig (Portable)
<b>Number Of JSAs Performed</b> Number Of Jsas Performed	6
<b>Was this a Primary Cement Job (Yes / No)</b> Primary Cement Job= Casing job, Liner job, or Tie-back job.	Yes
<b>Number of Unplanned Shutdowns</b> Unplanned shutdown is when injection stops for any period of time.	0
<b>Customer Non-Productive Rig Time (hrs)</b>	0

<b>Sales Order #:</b> 0902014355	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 1/11/2015
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> HARRY SAMSON		<b>API / UWI: (leave blank if unknown)</b> 05-045-22505-00
<b>Well Name:</b> WPX GM		<b>Well Number:</b> 0080644734
<b>Well Type:</b> DIRECTIONAL GAS	<b>Well Country:</b> USA	
<b>H2S Present:</b> No	<b>Well State:</b> COLORADO	<b>Well County:</b> GARFIELD

Lost time due to Halliburton in the start, execution, or completion of an ordered service or product, or delays in a follow-on service. Enter in decimal format. 0 if none.	
<b>Did We Run Wiper Plugs?</b> Did We Run Top And Bottom Casing Wiper Plugs?	Top
<b>If a top plug was run, was the plug bumped? (Yes/No/N/A)</b> If a top plug was run, was the plug bumped? (Yes/No/N/A)	Yes
<b>If applicable, was Halliburton float equipment used? (Yes/No/N/A)</b> If applicable, was Halliburton float equipment used? (Yes/No/N/A)	N/A
<b>If applicable, did the floats hold? (Yes/No/N/A)</b> If applicable, did the floats hold? (Yes/No/N/A)	Yes
<b>Mixing Density of Job Stayed in Designed Density Range (0-100%)</b> Density Range defined as +/- .20 ppg. Calculation: Total BBLs cement mixed at designed density divided by total BBLs of cement multiplied by 100	90
<b>Pump Rate (percent) of Job Stayed At Designed Pump Rate</b> Pump Rate range defined as +/- 1bbl/min. Calculation: Total BBLs of fluid pumped at the designed rate divided by Total BBLs of fluid pumped, multiplied by 100	8
<b>If applicable, were there returns throughout the job? (Yes/No/N/A)</b> If applicable, were there returns throughout the job? (Yes/No/N/A)	YES
<b>Nbr of Remedial Plug Jobs Rqd - HES</b> Number Of Remedial Plug Jobs Needed After Primary Plug Pumped By HES	0
<b>Nbr of Remedial Sqz Jobs Rqd - HES</b> Number Of Remedial Squeeze Jobs Required After Primary Job Performed By HES	0